

DOCKET NO. D-2012-001 CP-1

DELAWARE RIVER BASIN COMMISSION

**Lower Bucks County Joint Municipal Authority
Water Filtration Plant**

Tullytown Borough, Bucks County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by the Lower Bucks County Joint Municipal Authority (LBCJMA or docket holder) on January 25, 2012 (Application), for review of an existing water filtration plant (WFP). National Pollutant Discharge Elimination System (NPDES) Permit No. PA0056880 for this project was approved by the Pennsylvania Department of Environmental Protection (PADEP) on May 16, 2012, effective June 1, 2012.

The Application was reviewed for inclusion of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Bucks County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on July 11, 2012.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to approve the discharge of up to 0.7 million gallons per day (mgd) of filter backwash from the existing LBCJMA WFP via Outfall No. 003. This docket will also approve intermittent discharges (approximately twice per year) of up to 0.48 mgd of filter backwash from Outfall No. 002 and emergency/maintenance discharges to the LBCJMA wastewater treatment plant (WWTP) conveyance system. Prior to this approval, stream discharges were performed solely to cleanse the rectangular settling tanks two or three times per year. All other effluent was directed to the LBCJMA WWTP, which discharges to Water Quality Zone 2 of the tidal Delaware River at River Mile 122.1. The LBCJMA WWTP discharge was approved by the Commission via Docket No. D-93-68 CP-1 on March 23, 1994.

2. Location. The WFP will continue to discharge treated effluent to Water Quality Zone 2 of the tidal Delaware River at or near River Mile 122.3 (Delaware River) via Outfalls Nos. 002 and 003, in Tullytown Borough, Bucks County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
002	40° 07' 54"	74° 49' 08"
003	40° 07' 54"	74° 49' 08"

3. Area Served. The LBCJMA WFP supplies drinking water to Tullytown Borough as well as Bristol, Falls, and Middletown Townships, all located in Bucks County, Pennsylvania. The WFP processes up to 16 mgd of water, with a resulting filter backwash discharge of up to 0.7 mgd. Water treated by the WFP is withdrawn from the Delaware River and five (5) groundwater wells. These withdrawals are described in Docket No. D-69-190 CP, which was approved by the Commission on February 25, 1970.

For the purpose of defining the Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION Section of this docket.

4. Physical Features.

a. Design Criteria. The existing WFP will continue to discharge up to 0.7 mgd of treated filter backwash to the Delaware River. Cleansing of the rectangular settling tanks will continue to occur approximately twice per year and its effluent will be treated and discharged to the Delaware River as well. In the event of an emergency or while maintenance needs to be performed, the WFP will convey treated/untreated effluent to their existing WWTP via existing infrastructure.

b. Facilities. The WFP consists of a traveling bar screen, three raw water pumps, a flash mixing tank, two (2) flocculation tanks, a circular settling tank, two (2) rectangular settling tanks, four (4) filters, four (4) variable size sludge holding/thickening tanks, a slant tank, and two (2) belt filter presses.

The project facilities aren't located in the 100-year floodplain.

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal at a (State-approved) facility.

c. Water withdrawals. The potable water supply in the project service area is supplied by the docket holder as described in Section A.3. of this docket.

d. NPDES Permit / DRBC Docket. NPDES Permit No. PA0056880 was approved by the PADEP on May 16, 2012 (effective June 1, 2012) and includes final effluent limitations for a design discharge of 0.7 mgd to surface waters classified by the PADEP as warm water/migratory fishery (WWF/MF). The following average monthly effluent limits are among those listed in the NPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES Permit

OUTFALLS 002 & 003 (WFP)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	30 mg/l	As required by NPDES Permit

* DRBC Requirement

EFFLUENT TABLE A-2: DRBC Parameters Not Included in NPDES Permit

OUTFALL 003 (WFP)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	Monitor & Report *	Quarterly **
CBOD (5-Day at 20° C)*	Monitor & Report *	Quarterly *
Ammonia Nitrogen*	Monitor & Report *	Quarterly *

* DRBC Requirement

** See DECISION Condition II.o.

EFFLUENT TABLE A-3: DRBC Parameters Not Included in NPDES Permit

OUTFALL 002 (WFP)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	Monitor & Report *	During each discharge **
CBOD (5-Day at 20° C)*	Monitor & Report *	During each discharge *
Ammonia Nitrogen*	Monitor & Report *	During each discharge *

* DRBC Requirement

** See DECISION Condition II.o.

e. Cost. There are no construction costs associated with this existing facility.

f. Relationship to the Comprehensive Plan. The LBCJMA WFP shall be included in the Comprehensive Plan upon approval of this docket (See DECISION Condition I.).

B. FINDINGS

The purpose of this docket is to approve the discharge of up to 0.7 mgd of filter backwash from the existing LBCJMA WFP via Outfall No. 003. This docket also approves intermittent discharges (approximately twice per year) of up to 0.48 mgd of filter backwash from Outfall No. 002 and emergency/maintenance discharges to the LBCJMA WWTP conveyance system. Prior to this approval, stream discharges were performed solely to cleanse the rectangular settling tanks two or three times per year. All other effluent was directed to the LBCJMA WWTP, which discharges to Water Quality Zone 2 of the tidal Delaware River at River Mile 122.1.

At the project discharge site, the Delaware River is tidal and its flow is regulated by upstream reservoir releases. The Trenton low flow target is 2,500 cfs (1.62 billion gallons per day). The addition of the tidal tributaries upstream of the discharge location at their Q7-10 flow

and the low flow Trenton target results in a low flow of roughly 2,634 cfs (1.702 billion gallons per day) for the Delaware River at the discharge location (River Mile 122.3).

The nearest surface water intake of record for public water supply within a 5 mile tidal influence of the project discharge other than the intake for this WFP is operated by the City of Burlington, roughly 1.5 river miles away.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The limits in the NPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the *Water Quality Regulations* of the DRBC.

C. DECISION

I. Effective on the approval date for Docket No. D-2012-001 CP-1 below, the project and the appurtenant facilities described in Section A “Physical Features” of this docket shall be added to the Comprehensive Plan.

II. The project and appurtenant facilities as described in Section A “Physical Features” of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its NPDES Permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the *Water Quality Regulations* of the DRBC.

d. The docket holder shall comply with the requirements contained in the Effluent Tables in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results directly to the DRBC Project Review Section. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.

e. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

f. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

g. The discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 5°F above the average 24-hour temperature gradient displayed during the 1961-1966 period, nor shall such discharge result in stream temperatures exceeding 86°F.

h. The docket holder is permitted to treat and discharge the categories of wastewaters defined in the “Area Served” section of this docket.

i. The docket holder shall make wastewater discharge in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

j. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

k. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

l. A complete application for the renewal of this docket, or a notice of intent to cease the operations (withdrawal, discharge, etc.) approved by this docket by the expiration date, must be submitted to the DRBC at least 12 months prior to the expiration date below (unless permission has been granted by the DRBC for submission at a later date), using the appropriate DRBC application form. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below, the terms and conditions of this docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

m. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

n. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In

accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

o. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

BY THE COMMISSION

DATE APPROVED: July 11, 2012

EXPIRATION DATE: July 31, 2017